WHAT IS CLAIMED IS:

1. A cellulosic membrane, the membrane cast from a dope comprising a cellulosic polymer and a solvent, the membrane having a first porous face having a first average pore diameter, a second porous face having a second average pore diameter, and a porous supporting structure therebetween wherein the supporting structure comprises a reticulated network of flow channels, the first and second average pore diameters having an asymmetry of at least about 2:1, and wherein the porous faces and the porous supporting structure comprise a network of structural surfaces capable of contacting a filter stream.

2. The membrane of Claim 1, wherein the asymmetry between the average pore diameters of the first porous face and the second porous face is at least about 5:1.

3. The membrane of Claim 1, wherein the asymmetry between the average pore diameters of the first porous face and the second porous face is at least about 10:1.

4. The membrane of Claim 1, wherein the asymmetry between the average pore diameters of the first porous face and the second porous face is at least about 20:1.

5. The membrane of Claim 4, wherein the membrane has a molecular weight cut-off ranging from about 10k Daltons to about 300k Daltons.

6. The membrane of Claim 4, wherein the membrane has a molecular weight cut-off ranging from about 10k Daltons to about 50k Daltons.

7. The membrane of Claim 4, wherein the membrane has a molecular weight cut-off ranging from about 10k Daltons to about 30k Daltons.

8. The membrane of Claim 1, wherein the cellulosic polymer comprises a cellulose ester.

9. The membrane of Claim 1, wherein the cellulose ester comprises a cellulose acetate.

10. The membrane of Claim 1, wherein the cellulose acetate is selected from the group consisting of cellulose diacetate, cellulose triacetate, cellulose acetate butyrate, cellulose acetate propionate, cellulose nitrate, methyl cellulose, and mixtures thereof.

11. The membrane of Claim 1, wherein the cellulosic polymer on a surface of the membrane comprises cellulose.

12. The membrane of Claim 1, wherein the cellulose is produced via hydrolyzation of the membrane.

13. The membrane of Claim 1, wherein the cellulose is produced via saponification of the membrane.

14. The membrane of Claim 1, wherein the dope comprises a dispersion of the cellulosic polymer in the solvent.

15. The membrane of Claim 1, wherein the dope comprises a homogeneous solution of the cellulosic polymer in the solvent.

16. A method for preparing a cellulosic membrane, the method comprising:

providing a casting dope comprising a cellulosic polymer, a nonsolvent, and a solvent;

casting the dope to form a thin film;

exposing the film to a humid atmosphere for a period of time sufficient to allow formation of surface pores;

coagulating the film in a coagulation bath; and

recovering from the coagulation bath a cellulosic membrane, the membrane having a first porous face having a first average pore diameter, a second porous face having a second average pore diameter, and a porous supporting structure therebetween, the first and second average pore diameters having an asymmetry of at least about 2:1, wherein the porous faces and the porous supporting structure comprise a network of structural surfaces capable of contacting a filter stream, and wherein the structural surfaces comprise a hydrophilic moiety.

17. The method of Claim 16, further comprising:

rinsing the membrane in a rinsing bath, wherein the rinsing step is conducted after the coagulating step.

18. The method of Claim 16, further comprising:

drying the membrane at an elevated temperature.

19. The method of Claim 16, further comprising:

drying the membrane at room temperature.

20. The method of Claim 16, wherein the dope comprises a homogeneous solution.

21. The method of Claim 16, wherein the dope comprises a dispersion.

22. The method of Claim 16, wherein the nonsolvent is selected from the group consisting of alcohols, alkanes, ketones, carboxylic acids, ethers, esters, and mixtures thereof.

23. The method of Claim 16, wherein the nonsolvent is selected from the group consisting of 2-methoxyethanol, propionic acid, t-amyl alcohol, methanol, ethanol, isopropanol, hexanol, heptanol, octanol, acetone, butyl ether, methylethylketone, methylisobutylketone, ethyl acetate, amyl acetate, glycerol, diethyleneglycol, di(ethyleneglycol)diethylether, di(ethyleneglycol)dibutylether, polyethylene glycol, propionic acid, hexane, propane, nitropropane, heptane, octane, and mixtures thereof.

24. The method of Claim 16, wherein the nonsolvent comprises water.

25. The method of Claim 16, wherein the nonsolvent comprises an alcohol.

26. The method of Claim 16, wherein the alcohol is selected from the group consisting of methanol, ethanol, and mixtures thereof.

27. The method of Claim 16, wherein the nonsolvent comprises a mixture of water and an alcohol selected from the group consisting of methanol, ethanol, and mixtures thereof.

28. The method of Claim 16, wherein the solvent is selected from the group consisting of dimethylformamide, dimethylacetamide, dioxane, dimethylsulfoxide, chloroform, tetramethylurea, tetrachloroethane, and mixtures thereof.

29. The method of Claim 16, wherein the solvent comprises N-methylpyrrolidone.

30. The method of Claim 16, wherein the solvent comprises methylene chloride.

31. The method of Claim 16, wherein the dope further comprises triethylene glycol.

32. The method of Claim 16, wherein the dope comprises from about 2 wt. % to about 60 wt. % of nonsolvent.

33. The method of Claim 16, wherein the dope comprises from about 40 wt. % to about 75 wt. % of solvent.

34. The method of Claim 16, wherein the dope comprises from about 3 wt. % to about 20 wt. % of cellulosic polymer.

35. The method of Claim 16, wherein the dope comprises up to about 5 wt. % of triethylene glycol.

36. The method of Claim 16, wherein the dope further comprises a hydrophilic component.

37. The method of Claim 16, wherein the coagulation bath comprises water.

38. The method of Claim 37, wherein the coagulation bath further comprises methanol.

39. The method of Claim 17, wherein the rinse bath comprises water.

40. A method for separating a protein from a liquid, the method comprising:

providing a liquid containing a protein;

providing a cellulosic membrane, the membrane cast from a dope comprising a cellulosic polymer and a solvent, wherein the membrane has a first porous face having a first average pore diameter, a second porous face having a second average pore diameter, and a porous supporting structure therebetween wherein the supporting structure comprises a reticulated network of flow channels, the first and second average pore diameters having an asymmetry of at least about 2:1, wherein the porous faces and the porous supporting structure comprise a network of structural surfaces capable of contacting a filter stream, wherein the membrane comprises a cellulosic polymer, wherein the structural surfaces comprise a hydrophilic moiety, and wherein the membrane has a molecular weight cut-off ranging from about 10k Daltons to about 300k Daltons; and

contacting the liquid with the membrane, whereby a filtrate passes through the membrane and whereby a substantial quantity of the protein is retained by the membrane.

41. The method of Claim 40, wherein the liquid comprises a dairy product or bioprocessing stream.

42. The method of Claim 41, wherein the dairy product comprises milk.